

AMENDMENTS TO THE SPECIFICATION WITH MARKINGS TO SHOW CHANGES MADE

Amend the following paragraph(s):

[0017] --Other features and advantages of the present invention will be more readily apparent upon reading the following description of currently preferred exemplified embodiments of the invention with reference to the accompanying drawing, in which;

~~the sole FIGURE~~ FIG. 1 shows a cross-sectional view of a motor-driven milling spindle according to the present invention;

FIG. 2 is an enlarged detailed view of the area encircled in FIG. 1 and marked II; and

FIG. 3 is an enlarged detailed view of a modification of the area II.--

[0019] --This is one of two applications both filed on the same day. Both applications deal with related inventions. They are commonly owned and have the same inventive entity. Both applications are unique, but incorporate the other by reference. Accordingly, the following U.S. patent application, Appl. No. 10/820,445, is hereby expressly incorporated by reference: "SPINDLE UNIT WITH SWITCHABLE GEAR, AND METHOD FOR USING THE SPINDLE UNIT".--.

[0020] --Turning now to ~~the FIGURE~~ FIG. 1, there is shown a cross-sectional view of a separable motor-driven milling spindle according to the present invention including a housing 1 for accommodation of a drive unit 2 and a spindle head assembly or anterior spindle 3. The drive unit 2 basically includes an electric motor with a stator 4 and a rotor 5 which is shrink-fit on a drive shaft 6. The drive shaft 6 is supported on both ends by bearing sleeves 7, 8. The bearing sleeves 7, 8 can be moved in the axial direction with a hydraulic system (not shown). In the example depicted in ~~the FIGURE~~ FIG. 1, a piston space 9 is pressurized, allowing the bearing sleeve 8 with the drive shaft and the bearing sleeve 7 to move in a direction

away from the anterior spindle 3. A second piston space 10 is provided on the bearing sleeve 7 that faces the anterior spindle. When the second piston space 10 is pressurized, the bearing sleeve 7 with the drive shaft 6 and the bearing sleeve 8 move toward the anterior spindle 3.

[0021] --The anterior spindle 3 basically includes a spindle head shaft 11 and a tie rod 12 capable of actuating a collet 13 for clamping tools. The tie rod 12 and the collet 13 are shown in ~~the FIGURE~~ FIG. 1 and on an enlarged scale in FIG. 1 in two different positions. In the upper section of ~~the FIGURE~~ FIGS. 1 and 2, the tie rod 12 and the collet 13 are in a forward position adapted to eject a tool. In the lower section of ~~the FIGURE~~ FIGS. 1 and 2, the tie rod 12 and the collet 13 are in a retracted position, in which the tool is clamped. The axial pressure of the drive shaft 6 is provided via a tubular extension 14 of the drive shaft that presses against a corresponding shoulder 15 of the tie rod 12.--.

[0025] --The drive shaft 6 has a central bore 20 through which lubricants can be supplied to the tool. Since the spindle head 3 is configured to be removable from the drive unit 2, the tie rod 12 has a tubular extension 21 that faces the drive unit 2 and extends into the bore 20. The tie rod 12 also has a bore for supplying the lubricant. This bore is only partially indicated in ~~the FIGURE~~ FIG. 1. To facilitate insertion of the tubular extension 21 into the bore 20, the drive shaft 6 has a funnel-shaped receptacle 22 on the side facing the tie rod. --.

Add the following paragraph after paragraph **[0028]**:

-- FIG. 3 shows an enlarged detailed view of a modification of a separable motor-driven milling spindle. Parts corresponding with those in FIGS. 1 and 2 are denoted by identical reference numerals and not explained again. The description below will center on the differences between the embodiments. In this embodiment, the tie rod 12 has a central bore 27 for transporting a material, with the drive shaft 6 having a tube 6a extending into the central bore 27 and being removable therefrom.--.